

ME

ME batch mixers:
Smart and self-cleaning!



m-tec[®]
Technology for better building

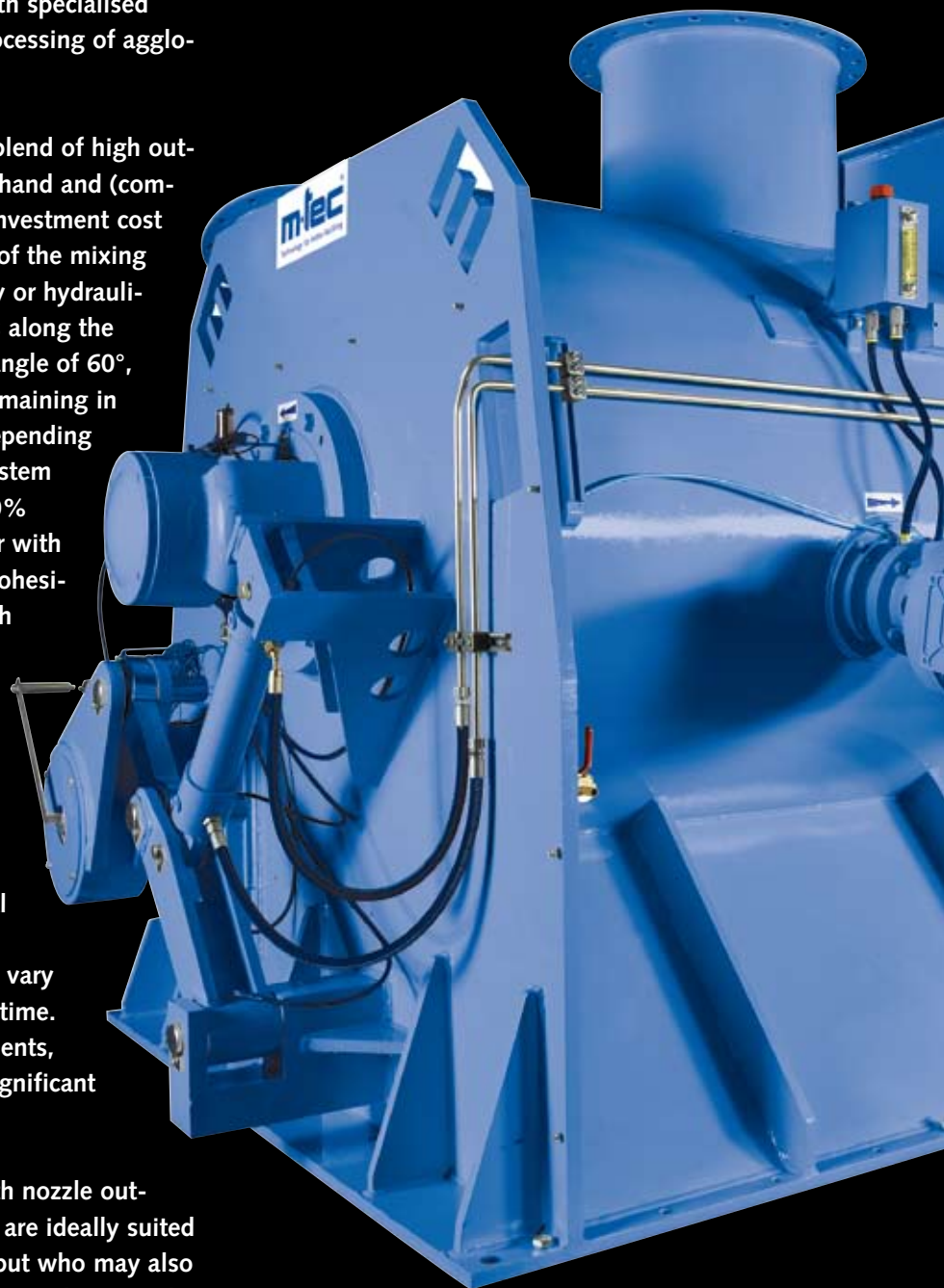
ME batch mixers: Smart and self-cleaning!

m-tec mixers operate according to the centrifugal principle. The special construction of the mixer unit (also available with low-wear fittings as required) creates a three-dimensional movement of the particles in the components to be mixed. Temperate mixing of the raw materials produces a high mixing quality within the briefest of times. The use of optionally available agitators, which are fitted with specialised tools, allows the successful, trouble-free processing of agglomerates, colour pigments and fibres.

This mixer type is regarded as a successful blend of high output owing to its rapid emptying on the one hand and (compared to twin-valve mixers) its low capital investment cost on the other. In the ME model the contents of the mixing chamber is emptied through a pneumatically or hydraulically operated emptying flap, which extends along the entire length of the mixer and opens to an angle of 60°, into a hopper. After emptying the residue remaining in the mixer is less than 2 % (this may vary depending on the product). m-tec's patented sealing system with mechanical self-cleaning ensures a 100% seal owing to a double-locking flap together with a toggle-lever locking system... even with cohesive mixing products containing relatively high levels of residual humidity.

While the end-product is continuously removed from the hopper, the mixing of a new batch can be started immediately, thus significantly optimising processing time in comparison to a mixer with no hopper. The rapid emptying of the mixer saves additional time and thus considerably increases the throughput of the mixer – although this will vary according to the product-dependent mixing time. When considering the total energy requirements, both the above points together result in a significant energy and hence cost saving.

High mix quality (compared with mixers with nozzle outlets) and reduced running time – ME mixers are ideally suited for customers who value high performance but who may also require manual cleaning during any switch in production. The actual mixing result is indistinguishable from that of our top MR model!



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> ME: Plus points



EasyClean

- Low-residue emptying ($\ll 2\%$) owing to a single-flap system with wide aperture angle
- Simple cleaning during switches in production
- High storage times and reliability owing to the patented sealing-system with self cleaning effect



EasyWork

- More or less continuous production owing to a downstream buffer container
- Long mixing shaft seal lifespan owing to a specifically developed sealing system
- Long mixing body lifespan
- Simple, rapid replacement of consumer parts
- High degree of safety owing to mechanical flap locking (using m-tec's toggle-lever locking system)



EasyMix

- Temperate product handling owing to specialised mixer blade geometry
- High mixing quality with the shortest mixing times
- High reproducibility of individual loads
- Improved processing of agglomerates, colour pigments and fibres thanks to optionally retrofit mixing agitators
- Simple sampling
- Shortest possible emptying time owing to single-flap-system



EasyLife

- Universal application for almost any mixing task
- Excellent price-performance ratio
- High efficiency owing to low energy consumption
- High availability owing to long maintenance intervals and ease of maintenance design
- High reliability and long lifespan due to its manufacture according to recognised m-tec quality standards



> ME: Technical data

Type	ME 11	ME 22	ME 45	ME 65	ME 90	ME 150	ME 220	ME 310	ME 460	ME 610	ME 840	ME 1100
Drive output (kW)												
Drive a.	-	5,5	7,5	11	15	22	37	45	75	90	132	160
Drive b.	5,5	7,5	11	18,5	30	37	55	75	110	160	200	-
Drive c.	-	-	18,5	30	37	55	75	110	160	200	-	-
Mixing blade rpm												
n (rpm)	170	155	135	135	135	120	120	113	100	100	90	90
Weight (kg)												
Mixer	730	920	1450	2000	2550	3120	4700	7100	8800	12200	21000	25000
End container	75	120	250	350	450	680	1200	1550	1900	3400	3000	4000
Drive a.	-	220	250	420	570	680	930	1400	1600	1800	2600	3000
Drive b.	220	250	420	570	840	930	1210	1600	2300	3000	3100	-
Drive c.	-	-	570	850	930	1250	1550	2200	3000	3100	-	-
Agitator												
Number	1	1	1	2	3	3	4	4	4	6	6	8

Agitators for all mixers

P (kW)	7,5
n (1/min)	3000

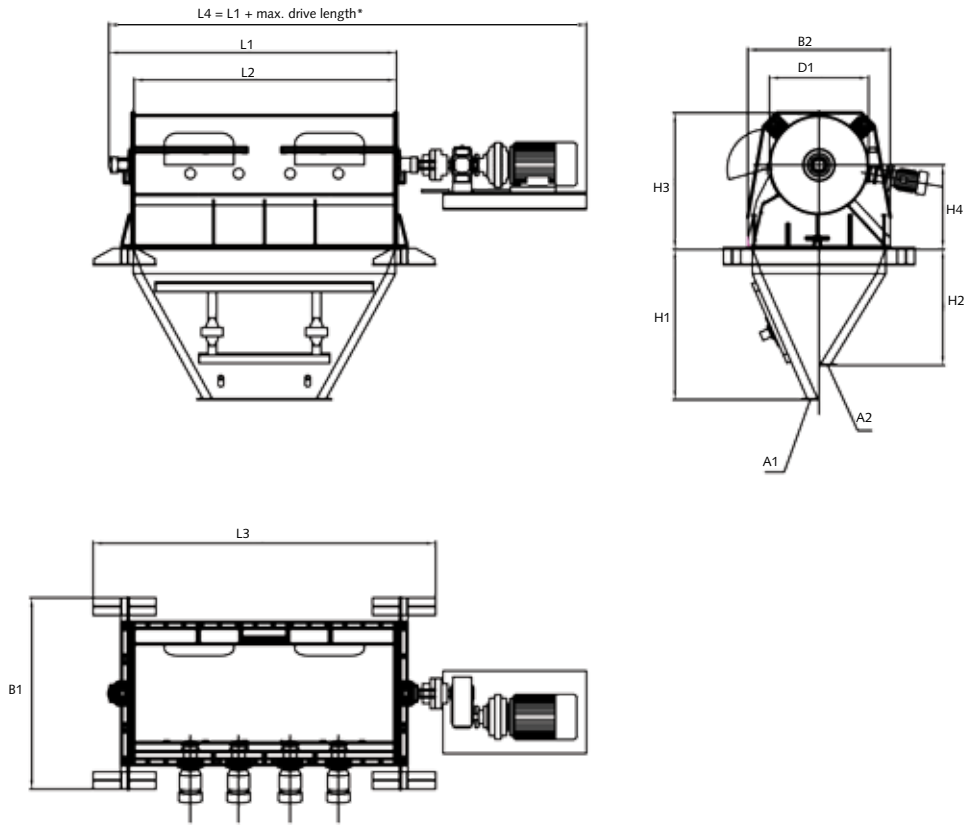
*Other fittings are available upon request.
Subject to technical modifications.*



Option: agitator quick change system

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> ME: Facts



*dependent on unit layout

Schematic drawing, shown without inlet nozzles

Type	L1	L2	L3	L4	D1	H1	H2	H3	H4	B1	B2	A1	A2
ME 11	1115	665	1065	2811	ø 540	480	-	1100	900	1400	900	ø 250	-
ME 22	1450	1000	1400	3146	ø 650	670	-	1280	930	1550	1000	ø 250	-
ME 45	1550	1100	1370	3808	ø 880	1200	-	1430	930	1650	1330	ø 300	-
ME 65	1950	1500	1770	4051	ø 880	1300	-	1450	930	1650	1330	ø 400	-
ME 90	2850	2000	2270	4942	ø 880	1600	1050	1450	930	1650	1330	ø 400	□ 250 x 1400
ME 150	2450	2000	2280	4675	ø 1110	1700	1350	1550	950	1950	1640	ø 400	□ 250 x 1400
ME 220	3450	3000	3280	5839	ø 1110	2500	1750	1550	950	1950	1640	ø 400	□ 250 x 1400
ME 310	3900	3400	3800	6903	ø 1250	3000	1950	1700	1050	2060	1760	ø 500	□ 250 x 2000
ME 460	3450	3000	3500	6399	ø 1635	2600	2300	2300	1300	2520	2220	ø 500	□ 250 x 2000
ME 610	4450	4000	4500	7439	ø 1635	3500	2600	2300	1300	2520	2220	ø 500	□ 250 x 2000
ME 840	4290	3840	4340	7279	ø 1930	3500	2600	2800	1700	3040	2740	ø 500	□ 250 x 2000
ME 1100	5490	5040	5540	8439	ø 1930	4000	-	2620	1700	3400	2740	ø 500	□ 250 x 2000

Subject to technical modifications, all measurements in mm



Picture showing drive unit



Picture showing agitator tools



Picture showing mixing tools

Typ	Mixing volume (dm ³)		Mixing output (m ³ /h)	
	max	min	90 s loading time	150 s loading time
ME 11	110	35	4,4	2,6
ME 22	220	65	8,8	5,3
ME 45	450	135	18	11
ME 65	650	195	26	16
ME 90	900	270	36	22
ME 150	1500	450	60	36
ME 220	2200	660	88	53
ME 310	3100	930	124	75
ME 460	4600	1380	184	110
ME 610	6400	1830	244	146
ME 840	8400	2500	336	200
ME 1100	11000	3300	440	264

The provided output values are for reference only



Picture showing discharge flap

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